

DEPARTMENT OF JUSTICE

Bureau of Justice Statistics

Computer Security Survey (Revised 5/17/04)

AGENCY: Office of Justice Programs, Bureau of Justice Statistics

ACTION: Notice of Solicitation, **Extended Deadlines and Clarification of Evaluation Criteria and Project Narrative (under Application Requirements)**

SUMMARY: The purpose of this notice is to announce a public solicitation to obtain a data collection agent through a Cooperative Agreement for the Computer Security Survey.

DATES: Applicants interested in submitting a proposal for this solicitation must register through the OJP Grants Management System (GMS) by 5 PM, EDT, **May 21, 2004**. Proposals must be received at the Bureau of Justice Statistics (BJS) by 5 PM, EDT, **June 18, 2004**, to be eligible for consideration.

SUBMISSION OF APPLICATIONS: The Office of Justice Programs (OJP) now requires that funding applications be submitted through the OJP Grants Management System (GMS). Using an established Internet account, go to www.ojp.usdoj.gov/fundopps.htm.

FOR FURTHER INFORMATION CONTACT: Ramona Rantala, Statistician, Bureau of Justice Statistics, 810 Seventh Street, NW, Washington, D.C. 20531; Phone (202) 307-6170 (This is not a toll free number); Email: Mona.Rantala@usdoj.gov.

AUTHORITY: 42 U.S.C. 3732 and 42 U.S.C. 3711.

SUPPLEMENTARY INFORMATION:

- **Program Goals**
- **Eligibility Requirements**
- **Scope of Work**
- **Evaluation Criteria**
- **Performance Measures**
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Program Goals

The purpose of this award is to provide funding to administer the Computer Security Survey. This data collection follows the 2001 Computer Security Survey Pilot Test, and is the first in a recurring survey series that collects information from a nationally representative sample of businesses designed to produce estimates that are statistically representative of the nation and self-representative of economic industries including, but not limited to, finance, utilities, transportation, health care, telecommunications, petroleum mining and manufacturing, chemical and drug manufacturing, and Internet service providers. The survey will obtain information

about computer infrastructure and security measures used, prevalence and types of cybercrime detected, and losses sustained by businesses due to cybercrime. The survey instrument and instructions, modified based on pilot test results, shall be provided by the Bureau of Justice Statistics (BJS). It is anticipated that approximately 36,000 businesses will answer the questionnaire, mainly through computerized self-administered questionnaires (CSAQ) and web-enabled instruments. BJS, in partnership with the Department of Homeland Security (DHS), anticipates making one award, not to exceed \$3.1 million for a 18-month period, pending OMB clearance, under this solicitation.

The implementation of the Computer Security Survey is part of an effort by BJS to expand statistical activities related to the nature, extent and consequences of cybercrime. At present, there is no nationally representative data collection targeted at businesses, their security practices, prevalence and types of cybercrime detected, or losses due to cybercrime. The survey will be based on a nationally representative sample of businesses. It shall include special topic areas, such as reporting incidents to law enforcement, justice system response, identity of suspected offender (including country of origin), computer security concerns, duration of computer downtime, effects on e-commerce, software piracy, and insurance covering losses due to security breaches. It shall be designed so that findings from the survey provide a systematic understanding of the nature and extent of cybercrime against businesses in the United States. The survey will provide important information for an ongoing series of reports dealing with computer related crime, and may be useful for policy makers engaged in research, planning, and budgeting.

The major reason for the absence of reliable estimates of the incidence and prevalence of cybercrime against and the resulting losses to businesses is the inherent difficulty in obtaining participation and securing a high response rate for a voluntary survey that asks respondents to provide sensitive information. In the extensive non-response follow-up of the Computer Security Survey pilot test, when refusal companies were asked why they would not provide data, 82% of 118 companies said they did not participate in voluntary surveys of any kind, 49% said they didn't have time, 17% cited reasons relating to data sensitivity, confidentiality or legal concerns, and 14% said the requested data were not available (companies could provide more than one reason). Response burden is a significant factor in the first two reasons listed. (The full report, Cybercrime against Businesses, is available online at <http://www.ojp.usdoj.gov/bjs/abstract/cb.htm>.) Another factor is the lack of clarity about which department within the company should respond. Sometimes, the IT or security department has the information on computer infrastructure and security breaches, but the accounting department has the cost and financial loss information. While concerns about sensitivity and confidentiality were cited less frequently, the impact of collecting the pilot test data under the U.S. Census Bureau's Title 13 confidentiality legislation is unknown. Another collection agency may face a higher rate of concern about confidentiality, which could result in higher non-response.

To address these methodological problems, BJS proposes the development of a data collection strategy which works with BJS and DHS to market the survey and solicit support from trade associations, provides CSAQ and web-enabled survey formats, uses both short and long forms of the questionnaire, and ensures and emphasizes adherence to data confidentiality and privacy

certification legislation (42 U.S.C. 3789g and 28 CFR part 22). A strong marketing strategy would educate businesses on the importance of reliable data, the shortened survey and electronic formats would reduce response burden, and adherence to confidentiality and privacy legislation would increase respondent confidence. It is anticipated that this proposed methodology should increase businesses' willingness to participate in the survey and supply sensitive information.

Eligibility Requirements

Both profit making and nonprofit organizations may apply for funds. Consistent with OJP fiscal requirements, however, no fees may be charged against the project by profit-making organizations.

Scope of Work

The objective of this project is to complete data collection for the Computer Security Survey. This includes extensive follow up, data verification, coding and data entry, and delivery of a final data set and documentation to BJS. The initial survey instrument and instructions shall be provided by BJS.

Specifically, the recipient of funds will:

1. Develop a detailed timetable for each task in the project. Data collection should begin within 6 months of project start and be completed within 4 months. All deliverables are due within 18 months. After the BJS Project Manager (PM) has agreed to the timetable, all work must be completed as scheduled.

2. Develop a plan for the national implementation of the Computer Security Survey in collaboration with the PM. The national implementation plan must address all aspects of the data collection including, but not limited to:

- sampling frame
- sample design representative of the nation and self-representative of economic industries including, but not limited to, finance, utilities, health care, transportation, telecommunications, petroleum mining and manufacturing, chemical and drug manufacturing, and Internet service providers
- techniques for obtaining high rates of participation by sampled businesses
- techniques for verifying accuracy of data
- steps to ensure data and respondent confidentiality
- methodology and protocol to address unit and item non-response, including, but not limited to, follow-up procedures and imputation methodology
- methodology to address post-survey weighting specifications to produce national and industry-level estimates, and standard errors.

3. Prepare and submit materials within 6 weeks of project start to obtain clearance from the Office of Management and Budget (OMB) for the full implementation of the survey on a national basis.

4. Develop computerized self-administered questionnaires (CSAQ) and web-enabled survey instruments for the Computer Security Survey within 1 month of project start. The Recipient shall develop the instruments in collaboration with the PM, based on the paper forms provided by BJS. The CSAQ and web-enabled instruments shall be developed in English. The instruments must maximize respondent cooperation and confidentiality, and not exceed an average respondent burden of 60 minutes. The instruments and technical instructions shall be tailored for use by company IT/security managers and CIO's.

The instruments shall be created from non-proprietary software commonly available to Government and Industry, in compliance with the Government's desire for portability in applications. BJS retains all rights to the source code used to produce the instruments. For the CSAQ and web-enabled instruments, authoring software must be capable of producing a hard copy version of the instruments and the associated instructions for purposes of explaining to the PM, BJS staff, and to OMB exactly how the instruments are being implemented. The Recipient shall make available to the PM a draft version of the CSAQ and web-enabled instruments for evaluation within 1 month of the project start.

5. Develop a marketing strategy. This strategy shall ensure and emphasize adherence to data confidentiality and privacy certification legislation (42 U.S.C. 3789g and 28 CFR part 22), and work with BJS and DHS to advertise the survey and solicit trade association support through, but not limited to, trade newsletters and meetings. DHS will identify a point of contact (POC) whom the Recipient shall work with to reach out to DHS's major industry advisory groups.

6. Conduct tests of the electronic instruments. Work with PM to conduct cognitive and field tests. Collaborate with PM to modify electronic instruments.

7. Identify a sampling frame. Describe its characteristics and demonstrate its adequacy to produce a representative sample at national and industry levels. Design a sampling plan capable of producing a sample which maximizes response rates and is representative at national and industry levels.

8. Draw a sample of businesses. Show that it is representative of the nation and self-representative of economic industries including, but not limited to, finance, utilities, health care, transportation, telecommunications, petroleum mining and manufacturing, chemical and drug manufacturing, and Internet service providers.

9. Develop a data collection infrastructure. The infrastructure shall support parallel databases or fields to differentiate original (base) data from corrected and imputed (adjusted) data. For data that is not corrected or imputed, base data shall be copied into the adjusted database or fields. In the adjusted database/fields, base, corrected, and imputed data shall be differentiated from each other through the use of flags.

10. Develop data edits to verify accuracy of data. BJS will provide initial documentation for edit specifications. The Recipient shall work with PM to develop other edits and subsequent data reconciliation/adjustment methodologies.

11. Mail survey packages to the sample of approximately 36,000 businesses within 6 months of project start. Survey packages shall include methods to access electronic or paper survey formats, endorsement letter, and instructions. It is anticipated that approximately 75% will respond through CSAQ or web-enabled instruments and the remainder through paper questionnaires.

12. Develop a methodology and protocol to address unit and item non-response. Conduct non-response follow-up including, but not limited to, extensive telephone calls and follow-up mailing or faxing of surveys. Follow-up should be completed within 4 months of initial mailout. The Recipient shall collaborate with PM to develop non-response imputation methodologies.

13. Implement and maintain an automated system to provide ongoing status of each survey respondent, complete documentation, and an inventory of follow up communication and procedures for each case. This automated tracking system shall be kept current and accessible to the BJS project monitor at all times, and may be integrated with the data collection infrastructure described above in #9.

14. Deliver to BJS electronic versions of the base and adjusted survey data at unit/item level, and documentation on CD-ROM and in ASCII file format. The adjusted dataset shall include corrected and imputed values. It shall also include base and final weights for calculating national and industry-level estimates. Survey documentation should include, but is not limited to, a comprehensive codebook detailing variable positions, data coding, variable and value labels, any recoding implemented during the data cleaning process; methods used for dealing with missing data, any data allocations, imputation, or non-response adjustment; factors used to generate final weights; standard error estimates and sufficient information (including design and sampling estimators) to enable the calculation of standard error estimates using software such as WesVars or Sudaan; and copies of all program code used to generate data or published statistics. Documentation should also include an analysis showing that the distribution of non-respondents does not impair national or industry level estimates. All data and documentation from this survey may be posted on the BJS website, and data archived at the Inter-University Consortium for Political and Social Research (ICPSR). Posted data shall comply with all confidentiality and privacy legislation. Final data and documentation shall be delivered to BJS within 18 months of project start. These data and documentation, along with all other work products created, collected, or compiled under this agreement, are the property of BJS.

15. Meetings and Progress Reports - Formal meetings between the PM and the Recipient shall be scheduled as needed. Such meetings shall take place at a location mutually acceptable to both parties. Conference calls between BJS project principals and the Recipient's Project Director shall be held at least once per month.

- The Recipient shall attend up to 2 formal meetings during the development phase of the instrument. Participants shall include Recipient, BJS, and DHS staff, consultants and subject matter experts selected from Federal, State and local governments and private industry. The first meeting shall be held in Washington, DC. The Recipient shall attend and participate in project development and assessment. The date and location for the second formal meeting has not been determined at this time.

- The Recipient shall submit to the PM semiweekly status reports showing current national- and industry-level response rates and standard errors.
- The Recipient shall submit to the PM quarterly progress reports including: (1) all activities performed during the quarter; (2) problems encountered and proposed or enacted solutions; (3) plans for the upcoming quarter; (4) a brief discussion of the expenditure of funds and a statement that indicates the percentage of the funds that have been expended; and (5) a statement as to whether the project will be completed in accordance within the time frame specified in the delivery schedule and within the budgeted amount.

Evaluation Criteria

Applicants must register by **May 21, 2004**. The application must be submitted by **June 18, 2004**. Applications will be reviewed competitively with the final award decision made by the Director of BJS. The applicant will be evaluated on the basis of:

1. The content of the proposal and how it addresses the tasks in the Scope of Work. This includes, but is not limited to, the implementation plan (sampling frame and design, survey methodology, techniques for ensuring a high response rate, etc.), electronic and web-based data collection instruments, and marketing strategy.

2. Demonstrated experience in applied survey research techniques, including data collection, and public use data file production. Data collection, with an emphasis on experience using CSAQ and web-enabled instruments, includes survey construction, instruction development, interview techniques, and the coding, entry, editing, verification, imputation, and weighting of data. Public use data file preparation includes availability of an adequate computing environment, knowledge of standard social science data processing software, and demonstrated ability to produce SPSS readable data files for analysis and report production.

3. Demonstrated ability to identify or construct a sampling frame and design a sample of businesses that will produce estimates that are statistically representative of the nation and self-representative of economic industries including, but not limited to, finance, utilities, health care, transportation, telecommunications, petroleum mining and manufacturing, chemical and drug manufacturing, and Internet service providers. This includes descriptions of methodology used to identify or construct frame, frame characteristics, and sampling design methodologies.

4. Demonstrated ability and experience in collecting data from businesses or similar entities. This includes the ability to foster a high response rate using methods including, but not limited to, marketing surveys, soliciting trade association support, strong follow-up efforts.

5. Demonstrated fiscal, management, staff, and organizational capacity to provide sound management for this project.

Performance Measures

To ensure compliance with the government Performance and Results Act (GPRA), Public Law 103-62, this solicitation notifies applicants that they are required to collect and report data which measures the results of the programs implemented with this grant. To ensure accountability of this data, for which OJP is responsible, performance is measured by the following outcomes:

1. Deliver the timetable within two weeks of project start, subject to approval by BJS.
2. Identify sampling frame and deliver a sample design. Demonstrate how sample design will produce estimates representative of businesses nationwide and self-representative of economic industries including, but not limited to, finance, utilities, health care, transportation, telecommunications, petroleum mining and manufacturing, chemical and drug manufacturing, and Internet service providers.
3. Identify techniques necessary to achieve an 80% unit response rate. These techniques shall include follow-up measures and assurances of confidentiality and privacy.
4. Identify techniques necessary to achieve a 95% item response rate. The data collection agent will have routine contact with businesses and must be knowledgeable about the content of the instrument.
5. Deliver a strategy that ensures adherence to data confidentiality and privacy certification legislation (42 U.S.C. 3789g and 28 CFR part 22).
6. Deliver to PM for approval the materials which will be used to obtain clearance from OMB for the implementation of the survey.
7. Deliver CSAQ and web-enabled survey instruments.
8. Deliver marketing strategy.
9. Report results of survey instrument testing.
10. Deliver sample design and demonstrate that it is representative of the nation and self-representative of the industries indicated.
11. Demonstrate data collection infrastructure.
12. Deliver edits and data reconciliation/adjustment methodology.
13. Deliver methodology and protocol to address non-response.
14. Deliver electronic version of survey data and documentation.

Application Requirements

All applications for funding must be submitted electronically through the OJP Grants Management System (GMS), under program title FY 04 BJS CSS.

For assistance in using GMS, please refer to:

GMS Application Procedures Handbook, a step-by-step guide for applying online www.ojp.usdoj.gov/fundopps.htm. An online Application procedures handbook is available on this page, and applicants may link directly to the OJP Grants Management System (GMS), which will provide online help screens or for technical assistance call the GMS Help Desk at 888-549-9901.

When applying for Federal funding, applicants must provide the following:

Applicant Information

Type of applicant
Employer Identification Number (EIN)
Organization unit
Legal jurisdiction name
Address
Contact person and phone number

Project Information

Title of project
Areas affected by project
Proposed project period of performance
Estimated funding request
Congressional District

Attachment 1 - Budget Detail Worksheet and budget narrative, shall include:

- a detailed budget including salaries of staff involved in the project and the portion of those salaries to be paid from the award, fringe benefits paid to each staff person, travel costs, supplies required for the project, sub-contractual agreements, and other allowable costs (an example of a Budget Detail Worksheet is available online at www.ojp.usdoj.gov/Forms/budget.pdf)
- a budget summary
- a budget narrative

Attachment 2 - Project Narrative, not to exceed 20 pages, shall include:

- a proposal including a description of the activities and implementation strategies outlined in the Scope of Work
- a project timeline for deliverables including tentative dates for major milestones
- a description of the survey methodology to be used including data collection methods and data entry, documentation, and management procedures

Attachment 3 - Staffing, shall include:

- a description of key staff including a staff loading chart, by task and contract year, showing the role and number of hours (per year) committed for proposed staff; identification of proposed key personnel and their qualifications for the significant functions in this project, along with concise descriptions of the duties each will perform under the contract; and an identification by name of all key personnel with decision-making authority

Privacy Certificate www.ojp.usdoj.gov/bjs/pub/pdf/bjsmpc.pdf. Certification of compliance with Federal regulation relating to the confidentiality of information identifiable to a private person collection for research and statistical purposes. Includes description of procedures to be followed to protect identifiable data.

Human Subjects Protection Certification of Compliance

www.ojp.usdoj.gov/bjs/pub/pdf/bjsssphs.pdf. Certification of compliance with Federal regulation relating to research and statistical projects to ensure the protection of human subjects against undue and unnecessary risks.

Assurances. The applicant must comply with the assurances in order to receive Federal funds under this program. It is the responsibility of the recipient of Federal funds to fully understand and comply with these requirements. Failure to comply may result in withholding of funds, termination of the award, or other sanctions.

Certifications Regarding Lobbying; Debarment, Suspension, and Other Responsibility Matters; and Drug-Free Workplace. Applicants are required to review and check off the box on the certification form included in their online application process. This form commits the applicant to compliance with the certification requirements under 28 CFR Part 69, "New Restrictions on Lobbying," and 28 CFR Part 67, "A Government-wide Debarment and Suspension (Non-procurement) and Government-wide Requirements for a Drug-Free Workplace (Grants)."

It is critical that the name, address, telephone number, fax number, and e-mail address of the authorizing official are correct on these online forms.

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Director, Bureau of Justice Statistics